Appendix 1: Cal eConnect Implementation Plan Definitions

General Definitions

American Recovery and Reinvestment Act of 2009 (ARRA): is a \$787.2 billion stimulus measure, signed by President Obama on February 17, 2009, that provides aid to States and cities, funding for transportation and infrastructure projects, expansion of the Medicaid program to cover more unemployed workers, Health IT funding, and personal and business tax breaks, among other provisions designed to "stimulate" the economy.

Beacon Community Grant Program: Beacon is an ARRA-funded program with the goal of funding select communities with advanced health IT infrastructure to foster a vision of the future where hospitals, clinicians, and patients are meaningful users of health IT to achieve measurable improvements in health care quality, safety and efficiency. The only Beacon Community currently funded in California is the University of California, San Diego.

California eHeath Coordinating Committee: A committee established by the California Heath and Human Services Agency to coordinate health IT and exchange efforts throughout the State. The Committee will coordinate various HITECH and eHealth initiatives to support the efforts of California providers and hospitals to become meaningful users of EHRs in a manner that benefits all residents of California

California Health Information Partnership and Service Organization (CalHIPSO): The Regional Health IT Extension Center funded to serve California providers in the regions outside of Los Angeles and Orange counties.

Centers for Medicare and Medicaid Services (CMS): is a federal agency within the United States Department of Health and Human Services that administers the Medicare program and works in partnership with State governments to administer Medicaid, the State Children's Health Insurance Program (SCHIP), and health insurance portability standards.

Consent: The Health Insurance Portability and Accountability Act Privacy Rule sets out two types of permission that are used to permit a covered entity to use or disclose protected health information: consent and authorization. A general "consent" is permitted but not required for use or disclosure of information for treatment, payment, and health care operations. Covered entities that choose to obtain a patient's consent for use or disclosure of information for treatment, payment, and health care operations have complete discretion in designing their consent form and process. The regulation does not define the term "consent" and does not specify any requirements for the content of consent forms. Some types of records require a different consent than HIPAA. Additional requirements for a legally effective consent may also be contained in state law or statutes like the federal Confidentiality of Alcohol and Drug Abuse Patient Records Act.

Consumer: the universe of patients or potential patients; any individual who has consumed a health product or service or is likely to require attention from health service providers at some point in his or her life span.

Data Use and Reciprocal Support Agreement (DURSA): The DURSA is a comprehensive, multi-party trust agreement that will be signed by all Nationwide Health Information Network (NHIN) Health Information Exchanges (NHIEs), both public and private, wishing to participate in the Nationwide Health Information Network. The DURSA provides the legal framework

governing participation in the NHIN by requiring the signatories to abide by a common set of terms and conditions. These common terms and conditions support the secure, interoperable exchange of health data between and among numerous NHIEs across the country. (Source: *Draft DURSA*, NHIN Cooperative DURSA Workgroup, Jan. 2009)

Electronic Health Record (EHR): As defined in the ARRA, an Electronic Health Record (EHR) means an electronic record of health-related information on an individual that includes patient demographic and clinical health information, such as medical histories and problem lists; and has the capacity to provide clinical decision support; to support physician order entry; to capture and query information relevant to health care quality; and to exchange electronic health information with, and integrate such information from other sources.

Electronic Prescribing (E-Prescribing): A type of computer technology whereby physicians use handheld or personal computer devices to review drug and formulary coverage and to transmit prescriptions to a printer or to a local pharmacy. E-prescribing software can be integrated into existing clinical information systems to allow physician access to patient-specific information to screen for drug interactions and allergies.

Eligible Provider: as defined in ARRA, eligible providers include physicians, dentists, nurse mid-wives and nurse practitioners, or physician assistants (practicing in a federally qualified health center or rural health clinic led by a physician assistant.)

Federally-Qualified Health Centers (FQHCs): are "safety net" providers such as community health centers, public housing centers, outpatient health programs funded by the Indian Health Service, and programs serving migrants and the homeless. FQHCs provide their services to all persons regardless of ability to pay, and charge for services on a community board approved sliding-fee scale that is based on patients' family income and size. FQHCs are funded by the federal government under Section 330 of the Public Health Service Act.

Governance Entity (GE): For the State of California, the Governance Entity is the State Designated Entity. (See definition for State Designated Entity.) In California, the GE is Cal eConnect.

Health Information Exchange (HIE): As defined by the Office of the National Coordinator and the National Alliance for Health Information Technology (NAHIT), Health Information Exchange means the electronic movement of health-related information among organizations according to nationally recognized standards.

Health Information Technology (Health IT or HIT): As defined in the ARRA, Health Information Technology means hardware, software, integrated technologies or related licenses, intellectual property, upgrades, or packaged solutions sold as services that are designed for or support the use by health care entities or patients for the electronic creation, maintenance, access, or HIE.

Health Information for Economic and Clinical Health (HITECH) Act: collectively refers to the health information technology provisions included at Title XIII of Division A and Title IV of Division B of the ARRA.

Health Information Technology Extension Center of Los Angeles (HITEC-LA): The Regional Extension Center funded for LA County.

Health Insurance Portability and Accountability Act (HIPAA): was enacted by Congress in 1996. Title I of HIPAA protects health insurance coverage for workers and their families when they change or lose their jobs. Title II of HIPAA, known as the Administrative Simplification (AS) provisions, requires the establishment of national standards for electronic health care transactions and national identifiers for providers, health insurance plans, and employers. The Administration Simplification provisions also address the security and privacy of health data. The standards are meant to improve the efficiency and effectiveness of the nation's health care system by encouraging the widespread use of electronic data interchange in the U.S. health care system.

Health Information Organization (HIO): An organization that oversees and governs the exchange of health-related information among organizations according to nationally recognized standards.

Health care Information Technology Standards Panel (HITSP): A multi-stakeholder coordinating body designed to provide the process within which stakeholders identify, select, and harmonize standards for communicating and encouraging broad deployment and exchange of health care information throughout the health care spectrum. The Panel's processes are business process and use-case driven, with decision making based on the needs of all NHIN stakeholders. The Panel's activities are led by the American National Standards Institute (ANSI), a not-for-profit organization that has been coordinating the U.S. voluntary standardization system since 1918.

Integrated Delivery Networks (IDNs): An Integrated Delivery Network (IDN) is a self-identified network of facilities and providers working together to offer a continuum of care to a specific market or geographic area (Source: Gerson Lehrman Group, 2010)

Interface: A means of interaction between two devices or systems that handle data.

Interoperability: Interoperability means the ability of health information systems to work together within and across organizational boundaries in order to advance the effective delivery of health care for individuals and communities.

Medi-Cal: Medi-Cal is California's Medicaid program. This is a public health insurance program which provides needed health care services for low-income individuals including families with children, seniors, persons with disabilities, foster care, pregnant women, and low income people with specific diseases such as tuberculosis, breast cancer or HIV/AIDS. Medi-Cal is financed equally by the State and federal government.

Medi-Cal EHR Incentive Program: A program designed to allocate meaningful use dollars to eligible Medicaid providers in California who adopt EHRs and and use them in a meaningful way. Medicaid agencies will also receive 90/10 federal-state match funding for developing and administering the incentive program for Medicaid providers who adopt and "meaningfully use" EHRs.

Meaningful EHR User: As set out in the ARRA, a Meaningful EHR user meets the following requirements: (i) use of a certified EHR technology in a meaningful manner, which includes the use of electronic prescribing; (ii) use of a certified EHR technology that is connected in a manner that provides for HIE to improve the quality of health care; and (iii) use of a certified EHR technology to submit information on clinical quality and other measures as selected by the Secretary of HHS.

Nationwide Health Information Network (NHIN): A national effort to establish a network to improve the quality and safety of care, reduce errors, increase the speed and accuracy of treatment, improve efficiency, and reduce health care costs. The NHIN is a set of standards, services and policies that enable secure health information exchange over the Internet.

Office of the National Coordinator (ONC): serves as principal advisor to the Secretary of HHS on the development, application, and use of health information technology; coordinates HHS's health information technology policies and programs internally and with other relevant executive branch agencies; develops, maintains, and directs the implementation of HHS' strategic plan to guide the nationwide implementation of interoperable health information technology in both the public and private health care sectors, to the extent permitted by law; and provides comments and advice at the request of OMB regarding specific Federal health information technology programs. ONC was established within the Office of the Secretary of HHS in 2004 by Executive Order 13335.

Patient: any consumer known to health service providers because care has been provided, or planned.

Personal Health Information (PHI): As defined by HIPAA, any information in the medical record or designated record set that can be used to identify an individual and that was created, used, or disclosed in the course of providing a health care service such as diagnosis or treatment.

Privacy: In December 2008, the Office of the National Coordinator for Health IT released its "Nationwide Privacy and Security Framework For Electronic Exchange of Individually Identifiable Health Information," ("Framework") in which it defined privacy as, "An individual's interest in protecting his or her individually identifiable health information and the corresponding obligation of those persons and entities that participate in a network for the purposes of electronic exchange of such information, to respect those interests through fair information practices." This language contrasts with the definition of privacy included in the National Committee on Vital and Health Statistics' ("NCVHS") June 2006 report, entitled, "Privacy and Confidentiality in the Nationwide Health Information Network." In its report, NCVHS recommended the following definition for "privacy": "Health information 'privacy' is an individual's right to control the acquisition, uses, or disclosures of his or her identifiable health data."

Regional Health Information Organization (HIO): A health information organization that brings together health care stakeholders within a defined geographic area and governs health information exchange among them for the purpose of improving health and care in that community.

Regional Health Information Technology Extension Centers (RHITECs) or Regional Extension Centers (RECs): As set out in the ARRA, Regional Health Information Technology Extension Centers will be established and may qualify for funding under ARRA to provide technical assistance and disseminate best practices and other information learned from the Health Information Technology Research Center to aid health care providers with the adoption of health information technology.

Rural Health Information Technology Consortium (RHITC): The Rural Health Information Technology Consortium (RHITC), under the California State Rural Health Association, was formed to assist the 69 hospital centered rural communities of California reach meaningful use

of health information technology (HIT). The RHITC scope supports the rural activities of the Medi-Cal EHR incentive program and Regional Extension Centers in assisting physicians, hospitals and clinics adopt EHRs, the activities of Cal eConnect in assisting the communities in achieving health information exchange, the activities of the California Telehealth Network in adopting broadband and mission-critical telemedicine services and the work of the county public and behavioural health departments in facilitating public health reporting, syndromic surveillance, population health and community mental health.

State-Designated Entities (GEs): As defined in the ARRA, State-Designated Entities (GEs) may be designated by a State as eligible to receive grants under Section 3013 of the ARRA. To qualify as an GE, an entity must be a not-for-profit entity with broad stakeholder representation on its governing board; demonstrate that one of its principal goals is to use information technology to improve health care quality and efficiency through the authorized and secure electronic exchange and use of health information; adopt nondiscrimination and conflict of interest policies that demonstrate a commitment to open, fair, and nondiscriminatory participation by stakeholders; and conform to other requirements as specified by HHS. The State Designated Entity in California is Cal eConnect.

Security: The Health Insurance Portability and Accountability Act Security rule defines "Security or Security measures" as "encompass[ing] all of the administrative, physical, and technical safeguards in an information system.

Two-Factor Authentication: An authentication factor is a piece of information and process used to authenticate or verify the identity of a person or other entity requesting access under security constraints. Two-factor authentication is a system wherein two different factors are used in conjunction to authenticate. Using two factors as opposed to one factor generally delivers a higher level of authentication assurance. Two-factor authentication typically is a signing-on process where a person proves his or her identity with two of the three methods: "something you know" (e.g., password or PIN), "something you have" (e.g., smartcard), or "something you are" (e.g., fingerprint or iris scan).

U.S. Department of Health and Human Services (HHS): is the federal government agency responsible for protecting the health of all Americans and providing essential human services. HHS, through CMS, administers the Medicare (health insurance for elderly and disabled Americans) and Medicaid (health insurance for low-income people) programs, among others.

Definitions Specific to the Cal eConnect Technical Architecture

Authorization Framework: Specifications for how entities assert authorization for information requests, and how those assertions are carried within the Messaging Framework.

Business Services: A set of value-added software components and their service-oriented interfaces available to any eligible stakeholder in the California health care system, built upon and using core services and the HIE infrastructure in order to achieve value-added business processes.

Discovery and Exchange Service Specifications: Technical interface details for a set of standards-based mechanisms that can be used by organizations to locate and exchange information on a statewide basis.

Entity: A business entity that assumes responsibility for safeguarding the patient health information under its control and for managing in a secure manner the exchange of PHI. Entities may be physician practices, hospitals, pharmacies, health plans, or HIOs.

Entity Registry: The Entity Registry provides a trusted registry of Entities engaged in statewide exchange and the Nodes or systems for which they are responsible. The Registry serves to ensure parties engaged in exchange of the validity and authenticity of exchange partners. It also provides the primary control point for the State to enforce policies associated with health information exchange.

HIE Infrastructure: The complete set of technical resources that enable HIE, including the core services and key standards-based specifications that establish the messaging framework and trust framework that enable meaningful use, along with other services.

Health Information Organization (HIO): An organization that oversees and governs the exchange of health-related information among principals. HIOs may include regional HIOs, IPAs or other private non-profit, private for-profit or government entities that oversee and govern HIE.

Information Submission Specification(s): Standards-based mechanism(s) for one entity to submit health information to another without the explicit requirement for an electronic request, conforming to the requirements of the Messaging Framework and Authorization Framework.

Lab Services: A value-added service that aids labs in routing lab results to the appropriate ordering providers and public health agencies.

Messaging Framework: Specifications for the basic exchange of information over the Internet, the messaging framework is based on web services following recognized national standards. It includes specifications for the web service standard, acceptable encryption standards, and the use of digital certificates to establish secure, reliable, encrypted exchange.

NHIN Gateway: The NHIN Gateway provides a secure mechanism to bridge between the State infrastructure and statewide exchange and the Nationwide Health Information Network. It provides the primary means for enabling exchange with federal agencies, and a means for exchanging with other statewide exchanges using a mechanism conforming to nationwide standards that is promoted by ONC.

Node: A health IT system that exists on the Internet and implements services that participate in statewide HIE in accordance with the messaging framework and authorization framework. Nodes may include EHRs, practice management (PM) systems, lab information systems (LISs), immunization registries, public health reporting and surveillance data warehouses, personal health records (PHRs) or patient-controlled health records (PCHRs), health plan claims and eligibility systems, etc. Nodes are not equivalent to Entities, but are operated by them. Entities take responsibility for Nodes.

Patient Discovery Specification(s): Standards-based mechanism(s) for two entities to agree that a match exists for a patient within each entity based on the exchange of demographics allowed by State policy and local policy of the entity. The Patient Discovery mechanism(s) should conform to the Messaging Framework and Authorization Framework, and should not require the use of a statewide identifier or statewide MPI.

Service Registry: The Service Registry provides information about how and where to direct information intended for specific individuals or systems, such as providers or their specific EHRs, and how to formulate the transactions such that they can be correctly processed when received.

State Infrastructure for Core Services: a minimal set of technical resources that enable statewide exchange, including the key standards-based specifications for the messaging framework and trust framework and software components that provide entity and service registry services.

Query and Response Exchange Specification(s): Standards-based mechanism(s) for one entity to request health information from another and retrieve that information, conforming to requirements of the Messaging Framework and Authorization Framework, and perhaps dependent upon Patient Discovery to enable patient matching.

Value-added Services: Services that provide an expanding set of value-added software services that enable higher-level business processes. While not required by meaningful use, Business Services provide the heavy lifting that reduces the burden on organization in exchanging data and realizing value in achieving meaningful use.